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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/069,642

02/28/2002

Katsuhiko Hiramatsu

L9289.02131

3592

24257 7590 04/14/2009

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EXAMINER

AGHDAM, FRESHTEH N

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

04/14/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/069,642	Applicant(s) HIRAMATSU ET AL.	
	Examiner FRESHTEH N. AGHDAM	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22,23 and 27-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-23 and 27-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed January 28, 2009 have been fully considered but they are not persuasive.

Applicant's Argument(s):

Regarding claims 22-23 and 27, page 6, the applicant argues that the claimed invention is not taught or suggested by the combination of Parkvall and Padovani "It naturally follows from this that if the modulation system is not known between a base station and a remote apparatus, then the amplitude of data bits is not maintained at a known ratio to the amplitude of the pilot signal. Padovani's system, therefore, requires a precondition that the modulation system is known in advance between a base station and a remote station."

Examiner's Response:

Regarding the argument set forth above, the examiner disagrees with the applicant because the modulation system is interpreted as modulation scheme that is kept the same and only the coding/data rate changes as it is shown in figure 3 of Parkvall and this way the ratio of the data amplitude is maintained at a known ratio to pilot amplitude.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22-23 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parkvall et al (US 6,542,736), and further in view of Padovani (US 6,411,799).

As to claim 22, Parkvall discloses a communication terminal apparatus comprising: a measuring section that measures the reception quality of a control signal (e.g. pilot signal) transmitted from a base station apparatus (Fig. 11, step 150); an obtaining section that obtains from a received signal transmit power value information comprising information of variable transmit power of the control channel signal (step 152; current transmit power value) and information of variable transmit power value of the data channel signal (when the transmit power value of the pilot signal is maintained at a known ratio to the transmit power value of the data ; therefore when the transmit power value of the control channel signal is known the transmit power value of the data channel signal is also known as it is evidenced by Padovani (col. 6, lines 49-67; col. 15, lines 30-41)); an estimating section that estimates the reception quality of said data channel signal measured by the measuring section and the transmit power value information obtained by the obtaining section (step 152); a deciding section that decides a modulation coding scheme to be used for the data channel signal using the estimated reception quality of the control channel signal (step 152); a transmitting section that transmits information of the modulation coding scheme decided by the deciding section to the base station apparatus (Fig. 11, block 110; Col. 10, lines 49-65). Therefore, it

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would have been obvious to one of ordinary skill in the art to combine the teaching of Padovani with Parkvall in order to reduce hardware complexity by obtaining the transmit power value information that is used for modulation coding scheme determination by obtaining only the transmit power value of the control channel signal as long as the amplitude of the data channel signal is maintained at a known ratio to the amplitude of the control channel signal.

As to claim 23, Parkvall further discloses selecting section for selecting a target base station apparatus with the best estimated reception quality of the data channel signal from among all the base station apparatuses as a request destination of the data channel signal (Col. 3, lines 6-9; Fig. 11, step 158), wherein the transmitting section transmits information of the modulation and coding scheme used for the data channel signal decided using the estimated reception quality of the data channel signal of the target base station apparatus to the target based station apparatus (step 158; Col. 10, lines 49-65).

As to claim 27, Parkvall discloses a communication method comprising: a measuring step of measuring the reception quality of a control signal (e.g. pilot signal) transmitted from a base station apparatus (Fig. 11, step 150); an obtaining step of obtaining from a received signal transmit power value information comprising information of variable transmit power of the control channel signal (step 152; current transmit power value) and indirectly information of variable transmit power value of the data channel signal (when the transmit power value of the pilot signal is maintained at a known ratio to the transmit power value of the data ; therefore when the transmit power

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value of the control channel signal is known the transmit power value of the data channel signal is also known as it is evidenced by Padovani (col. 6, lines 49-67; col. 15, lines 30-41)); an estimating step of estimating the reception quality of said control channel signal measured by the measuring step and the transmit power value information obtained by the obtaining step (step 152); a deciding step of deciding a modulation coding scheme to be used for the data channel signal using the estimated reception quality of the control channel signal (step 152); a transmitting step of transmitting information of the modulation coding scheme decided by the deciding step to the base station apparatus (Fig. 11, block 110; Col. 10, lines 49-65); a receiving step of receiving at the base station apparatus information of the decided modulation coding scheme (Fig. 4, block 62); and a transmitting step of transmitting at the base station apparatus the data channel signal according to the modulation coding scheme (Fig. 4, blocks 60 and 78). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teaching of Padovani with Parkvall in order to reduce hardware complexity by obtaining the transmit power value information that is used for modulation coding scheme determination by obtaining only the transmit power value of the control channel signal as long as the amplitude of the data channel signal is maintained at a known ratio to the amplitude of the control channel signal.

As to claims 28-29, Parkvall teaches that the modulation system to be decided is QAM with differing coding rates (fig. 3), wherein the modulation system provides signal points of a plurality of amplitudes at a same phase as the modulation system to be used for the data channel.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRESHTEH N. AGHDAM whose telephone number is (571)272-6037. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/F. N. A./

Examiner, Art Unit 2611

/Chieh M Fan/

Supervisory Patent Examiner, Art Unit 2611